

CLAIMS

What is claimed is:

1. A system comprising:

a processing system; and

a communication adapter adapted to be coupled to a transmission medium,

wherein the processing system further comprises:

logic to receive a sleep message from a power management system; and

logic to place the communication adapter in a sleep state in response to

the sleep message.

2. The system of claim 1, wherein the processing system further comprises logic to selectively lower a speed of a clock signal to control the communication adapter.

3. The system of claim 2, wherein the processing systems further comprises logic to selectively lower the speed of the clock from a first clock speed to a second speed, wherein the first clock speed controls the communication adapter to communicate with a transmission medium according to a first communication protocol and the second clock speed controls the communication adapter to communicate with the transmission medium according to a second communication protocol.

4. The system of claim 2, wherein the processing system further comprises: logic to determine the speed of the clock signal in response to the sleep message; and

logic to selectively lower the speed of the clock signal if the speed of the clock signal exceeds a predetermined clock speed.

5. The system of claim 2, wherein the processing system further comprises:
logic to determine a first communication protocol being used by the communication adapter in response to the sleep message; and
logic to selectively command the communication adapter to use a second communication protocol if a data rate or clock signal associated with the first communication protocol exceeds a threshold.

6. The system of claim 1, wherein the processing system further comprises logic to place the communication adapter in an auto-select state in response to a resume message.

7. The system of claim 1, wherein the system further comprises a data bus coupled between the communication adapter and the processing system, and wherein the processing system further comprises logic to selectively initiate a write command on the data bus addressed to the communication adapter specifying a change in one of a clock signal frequency and a communication protocol in response to the sleep message.

8. An article comprising
a storage medium comprising machine-readable instructions stored thereon for:
receiving a sleep message; and
placing a communication adapter in a sleep state in response to the sleep message.

9. The article of claim 8, wherein the storage medium further comprises machine-readable instructions stored thereon for selectively lowering a speed of a clock signal to control the communication adapter.

10. The article of claim 9, wherein the storage medium further comprises machine-readable instructions stored thereon for selectively lowering the speed of the clock from a first clock speed to a second speed, wherein the first clock speed controls the communication adapter to communicate with a transmission medium according to a first protocol and the second clock speed controls the communication adapter to communicate with the transmission medium according to a second protocol.

11. The article of claim 9, wherein the storage medium further comprises machine-readable instructions stored thereon for:
determining the speed of the clock signal in response to the sleep message; and
selectively lowering the speed of the clock signal if the speed of the clock signal exceeds a predetermined clock speed.

12. The article of claim 9, wherein the storage medium further comprises machine-readable instructions stored thereon for:
determining a first communication protocol being used by the communication adapter in response to the sleep message; and
selectively commanding the communication adapter to use a second communication protocol if a data rate or clock signal frequency associated with the first communication protocol exceeds a threshold.

13. The article of claim 8, wherein the storage medium further comprises machine-readable instructions stored thereon for placing the communication adapter in an auto-sensing state in response to a resume message.

14. A method comprising:

receiving a sleep message; and

placing a communication adapter in a sleep state in response to the sleep

message.

15. The method of claim 14, wherein the method further comprises selectively lowering a speed of a clock signal to control the communication adapter.

16. The method of claim 15, wherein the method further comprises selectively lowering the speed of the clock from a first clock speed to a second speed, wherein the first clock speed controls the communication adapter to communicate with a transmission medium according to a first communication protocol and the second clock speed controls the communication adapter to communicate with the transmission medium according to a second communication protocol.

17. The method of claim 15, wherein the method further comprises:
determining the speed of the clock signal in response to the sleep message; and
selectively lowering the speed of the clock signal if the speed of the clock signal exceeds a predetermined clock speed.

18. The method of claim 15, wherein the method further comprises:
determining a first communication protocol being used by the communication
adapter in response to the sleep message; and
selectively commanding the communication adapter to use a second
communication protocol if a data rate or clock signal associated with the first
communication protocol exceeds a threshold.

19. The method of claim 14, wherein the method further comprises placing
the communication adapter in an auto-select state in response to a resume message.

20. An apparatus comprising:
means for receiving a sleep message; and
means for placing a communication adapter in a sleep state in response
to the sleep message.

21. The apparatus of claim 20, wherein the apparatus further comprises
means for selectively lowering a speed of a clock signal to control the communication
adapter.

22. The apparatus of claim 21, wherein the apparatus further comprises
means for selectively lowering the speed of the clock from a first clock speed to a
second speed, wherein the first clock speed controls the communication adapter to
communicate with a transmission medium according to a first communication protocol
and the second clock speed controls the communication adapter to communicate with
the transmission medium according to a second communication protocol.

23. The apparatus of claim 21, wherein the apparatus further comprises:
means for determining the speed of the clock signal in response to the sleep
message; and
means for selectively lowering the speed of the clock signal if the speed of the
clock signal exceeds a predetermined clock speed.
24. The apparatus of claim 21, wherein the apparatus further comprises:
means for determining a first communication protocol being used by the
communication adapter in response to the sleep message; and
means for selectively commanding the communication adapter to use a second
communication protocol if a data rate or clock signal associated with the first
communication protocol exceeds a threshold.
25. The apparatus of claim 20, wherein the apparatus further comprises
means for placing the communication adapter in an auto-select state in response to a
resume message.